

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
RICHMOND DIVISION**

SIERRA CLUB,

Plaintiff,

V.

VIRGINIA ELECTRIC AND POWER
COMPANY d/b/a DOMINION VIRGINIA
POWER,

Defendant.

Case No. 2:15-cv-00112-JAG-RJK

**PLAINTIFF SIERRA CLUB'S
POST-TRIAL MEMORANDUM OF LAW**

The Sierra Club established at the trial of this case that Dominion is liable for violating the Clean Water Act, 33 U.S.C. § 1251 *et seq.*, under all three Counts in the Complaint.

Dominion's liability here is straightforward.

Under Count I, Sierra Club proved that Dominion has (1) discharged (2) a pollutant (3) to Clean Water Act (“CWA”) jurisdictional waters (4) from point sources. 33 U.S.C. §§ 1311(a), 1362. There is no question that arsenic is a pollutant, (Proposed Findings of Fact, or “PFF”, 150-152), or that the waters surrounding the Chesapeake Energy Center (“CEC”) Site are covered by the CWA, (PFF 24-25). The question before the Court is whether (1) arsenic from “point sources” (2) flows through groundwater to surface water (3) by a direct hydrologic connection.

Sierra Club established these elements at trial. Dominion is discharging pollutants from the Historic Pond, the Ash Landfill, the Bottom Ash Pond, the Sedimentation Pond, and the

associated Berms and Dikes (collectively, “Coal Ash Sources”). (PFF 32-93.) These Coal Ash Sources are all designed to hold coal ash and associated wastewaters, and they discharge to the surrounding surface waters via connected groundwater. Dominion sluiced coal ash to the “Historic Pond” – which actually consists of at least three, unlined settling ponds – from 1953 to 1984. (PFF 32-44.) Much of the ash in the Historic Pond is sitting in and saturated by groundwater. (PFF 128, 176, 177, 232.) Arsenic flows from the Historic Ash Pond to the surrounding surface waters. (PFF 239-287.) Dominion constructed the Ash Landfill in 1984 on top of the Historic Pond. (PFF 45-49.) The Ash Landfill is constructed with a .05 cm liner. (PFF 50-51.) Arsenic-contaminated water discharges from the Ash Landfill to groundwater, and then to surface water, as a function of leachate from the landfill, (PFF 222-226), and leakage through the liner, (PFF 210-238, 239-287). The Bottom Ash and Sedimentation Ponds are both unlined and leak arsenic-contaminated water to groundwater that flows to surface water. (PFF 62-80, 239-287.) The Berms and Dikes associated with these sources are constructed partially out of ash, and leak arsenic-contaminated water through groundwater to surface water. (PFF 81-93.) Thus, the Coal Ash Sources are “point sources”: they are “discernible, confined and discrete” conduits and containers that convey arsenic through groundwater via a direct hydrological connection to surface waters. 33 U.S.C. § 1362(14); (PFF 94-102.)

Under Counts II and III, Dominion is also violating the plain text of two express terms of its CWA permit (a “Virginia Pollution Discharge Elimination System” or “VPDES” Permit). (PFF 114-121.) These provisions broadly prohibit coal ash and associated pollutants from entering “state waters” – a term the Virginia Code defines to include groundwater and surface waters. (PFF 117.) Much of Dominion’s coal ash is in the groundwater, and there is no dispute that this coal ash contaminates groundwater at the CEC Site with arsenic. (PFF 149-185.)

This Court should find Defendant liable for violating the CWA under all three Counts of Plaintiff's Complaint, order injunctive relief to remedy and cease these violations, and assess a civil penalty to recover the economic benefit of these violations and deter future ones.

LEGAL BACKGROUND

Congress passed the Federal Water Pollution Control Act of 1972, more commonly called the Clean Water Act ("CWA" or "the Act"), to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The CWA set sweeping national goals, including that "the discharge of pollutants into the navigable waters be eliminated by 1985." 33 U.S.C. § 1251(a)(1). CWA Section 301(a) broadly proscribes "the discharge of any pollutant by any person" except in compliance with the Act. 33 U.S.C. § 1311(a). In addition to providing for federal enforcement, Congress authorized enforcement suits by "a person or persons having an interest which is or may be adversely affected." 33 U.S.C. §§ 1365(a), (g); *Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Foundation, Inc.*, 484 U.S. 49, 62 (1987) (explaining the citizen suit's "central purpose of permitting citizens to abate pollution when the government cannot or will not command compliance").

ARGUMENT

I. DOMINION IS LIABLE FOR VIOLATING THE CLEAN WATER ACT.

A. Dominion is Violating the Clean Water Act for its Unpermitted Discharges of Arsenic from its Coal Ash Sources from Groundwater to Surface Waters (Count I).

1. Facts Related to Dominion's Violations in Count I.

The evidence adduced at trial establishes that Dominion is illegally discharging arsenic from point sources to the surrounding surface waters via hydrologically connected groundwater without a permit. That evidence consists of: (1) the testimony offered by Sierra Club's experts;

(2) the testimony of Dominion's employees; (3) the data and information contained in reports prepared by Dominion's consultants; and (4) the testimony of James Golden, Director of Operations for the Virginia Department of Environmental Quality ("DEQ").

Dominion called only one fact witness at trial, Cathy Taylor. Ms. Taylor described the sources of coal ash at the CEC Site, including how the Coal Ash Sources came to exist over the history of Dominion's coal ash disposal practices. (Tr. Trans. 596:12-693:4; PFF 15, 16, 32, 67, 79, 97-100, 113.) Plaintiff's expert in hydrogeology, Anthony Brown, similarly described the coal ash sources, and explained that groundwater flows from these sources, carrying arsenic with it, and discharging to the surrounding surface waters. (Tr. Trans. 83:2-240:9 ; PFF 1, 34, 39, 60, 75, 80, 81, 93, 97-100, 178, 179, 185-187, 201-204.) Water from the Coal Ash Sources flows as groundwater for approximately 70 to 100 feet from the edge of these sources to surrounding surface waters. (PFF 210; Trial Tr. 280:8-17.) Plaintiff's expert on geochemistry, Robert Parette, explained that CEC site conditions are not favorable for the removal (or adsorption) of arsenic along this short flow path, meaning that arsenic flows with the groundwater to the surface waters. (Tr. Trans. 242:20-317:25; PFF 239, 240.) Mr. Brown, Dr. Parette, and another of Plaintiff's experts, Dr. Phillip Bedient, further explained the effect of tidal pulsing in contributing to leaching of arsenic from the Coal Ash Sources to surrounding surface waters. (PFF 235-238, 244-246, 266, 371.)

Mr. Brown and Dr. Parette relied on data generated by Dominion's consultant, AMEC, in a 2010 report that confirmed their opinions that arsenic is reaching surface waters.¹ (PFF 248-

¹ Counsel for Dominion suggested at trial that the statute of limitations prevents Plaintiff from using data from more than five years before Plaintiff filed suit. (Tr. Trans. at 951:17-22.) This argument is without merit. The statute of limitations applies only to the commencement of "an

287; Pl. Ex. 168-B at DOM00000872-998.) AMEC analyzed the so-called “pore water” from core samples taken of the sediments under the Southern Branch of the Elizabeth River, Deep Creek and the Cooling Water Channel. (PFF 250-255.) AMEC reported arsenic at the sediment/water interface in excess of the chronic toxicity criterion of 36 micrograms per liter ($\mu\text{g/L}$) and acute toxicity criterion of 69 $\mu\text{g/L}$ to protect aquatic life. (PFF 256 – 263.) For example, arsenic was detected at 217 $\mu\text{g/L}$ at 0-2 inches below the bottom of the Cooling Water Channel. (PFF 256.)

Plaintiff called Dominion’s employee with the most experience working with CEC Site groundwater, Don Hintz, through video testimony as a Rule 30(b)(6) deponent on behalf of Dominion and through live testimony. Mr. Hintz testified that Dominion’s coal ash is the source of the elevated levels of arsenic monitored in groundwater. (PFF 169-172.) Mr. Hintz acknowledged that, during his individual deposition, he testified that Dominion’s coal ash is also the “leading source” of the arsenic found in the AMEC 2010 pore water samples. (PFF 270.)

Finally, during cross examination at trial, James Golden, the Director of Operations for the Virginia DEQ, acknowledge that he had stated that arsenic-contaminated groundwater at the CEC Site flows to surface waters during his deposition:

Q. Would you agree that contaminated groundwater is discharging to surface water at the Chesapeake Energy Center?

A. Yes

Q. Would you agree that arsenic in the groundwater at the Chesapeake Energy Center is being released to surface water?

action, suit or proceeding *for the enforcement of any civil fine, penalty, or forfeiture, pecuniary or otherwise[.]*” 28 U.S.C. § 2462 (emphasis added). It does not bar evidence.

A. I would think it is. I don't know in what quantities or how much. Again, that's a very site-specific thing. But the facility's been there since 1950 something, so, yes.

(PFF 243; Trial. Tr. 818:2-820:8.)

Through this evidence, Plaintiff carried its burden to establish a prima facie case, shifting the burden to Defendant. *See Chesapeake Bay Foundation v. Gwaltney*, 791 F.2d 304 (4th Cir. 1986), *rev'd on other grounds*, 484 U.S. 49 (1987). Defendant has not carried its burden to rebut Plaintiff's evidence.

Defendant attempted to rebut Plaintiff's case with expert testimony that lacks credibility. Dr. Mayo—one of two hydrologists proffered by Dominion—testified that groundwater flows laterally at the CEC Site, in the direction of the surrounding surface waters, but he couldn't say one way or the other where it went. (Trial Tr. 861:7-863:22; PFF 265.) The testimony of Dr. Stephens, Defendant's other hydrologist, was even less credible. While on direct Dr. Stephens opined that the AMEC 2010 pore water data may be biased high, he admitted that it also could be biased low.² (PFF 284.) Dr. Stephens also opined that arsenic measured at more than 18 times over the groundwater protection standard could be naturally occurring. (Trial Tr. 747:918.) However, he acknowledged that, out of the numerous consultants and experts who have analyzed the site data, he stands alone in offering this opinion. (Trial Tr. 757:19-758:22.) Finally, Dr. Stephens speculated that elevated arsenic (measured at 217 µg/L) in pore water taken from sediments under the cooling water channel could have migrated a mile and a half up the Southern Branch of the Elizabeth River, turned right up Deep Creek, turned right again, and migrated upstream against the flow of cooling water discharged from the plant. (Trial Tr.

² Dr. Parette further explained why Dr. Stephens' opinion regarding biased data is incorrect in his rebuttal testimony. (Trial Tr. at 942:5 – 943:25.)

749:15-751:4.) Because Dominion’s experts offer opinions that lack credibility, this Court should disregard their testimony.³ Defendant’s attempts to undermine its own data from the AMEC 2010 report are similarly without merit. (PFF 276 – 287.)

2. The Clean Water Act’s Definition of “Point Source” Encompasses the Coal Ash Basins at Issue Here.

The CWA defines the term “point source” as “*any* discernible, confined and discrete conveyance, *including but not limited to any . . . conduit . . . [or] container . . . from which pollutants are or may be discharged.*” 33 U.S.C. § 1362(14) (emphases added). Thus, the CWA makes clear that *any* container, conduit, or other “discernible, confined and discrete conveyance” from which pollutants are discharged to waters of the United States is a point source.

The Fourth Circuit has made clear that the term point source encompasses treatment and storage basins like the Coal Ash Sources at issue here. In *Consolidation Coal Co. v. Costle*, 604 F.2d 239 (4th Cir. 1979), *rev’d on other grounds*, 449 U.S. 64 (1980), the coal mining industry challenged a regulation governing “coal preparation plants and associated areas” on the grounds that the regulation failed to distinguish between point and non-point sources not covered by the Act. *See id.* at 249. The Fourth Circuit squarely rejected this argument, holding that the regulation applied only to discharges from point sources that were covered under the CWA. *Id.* at 250. In reaching this conclusion, the court specifically reviewed the regulation’s definitions of

³ Questions regarding “an expert’s credibility and the weight accorded to his testimony are ultimately for the trier of fact to determine.” *Drennen v. United States*, No. Civ.A.5:06-CV-00390, 2008 WL 803156, at *4 (S.D.W. Va. Mar. 20, 2008), *aff’d*, 375 Fed. Appx. 299 (4th Cir. 2010) (citation and quotations omitted). In *Holm v. United States*, 325 F.2d 44, 46 (9th Cir. 1963), the district court judge instructed the jury that, with regard to the weight to be given to an expert’s testimony, “. . . you may reject his opinion entirely if you think that the reasons given in support of his opinions are unsound . . . if you find, for example, that he has contradicted himself, or has in any way been impeached, you may disregard all of his testimony, or it can be weakened.” *Id.* at 46-47. The Ninth Circuit found these instructions “entirely proper.” *Id.* at 47.

“coal preparation plant” and “coal preparation plant associated areas.” The latter definition included, among other things, “slurry ponds, drainage ponds, . . . and coal storage piles and facilities,” *id.* at 249-50 – precisely the type of repositories at issue in this case. The court explained that the CWA definition of a point source, not just the regulation, creates CWA coverage of these sources. *Id.* at 249. Thus, contrary to Defendant’s characterization of this case at trial, (Trial Tr. at 953:8-18), the Fourth Circuit’s decision in *Consolidation Coal* makes clear that the term “point source” encompasses the CEC Coal Ash Sources at issue here.

The U.S. District Court for the Middle District of North Carolina recently held that similar coal ash basins at Duke Energy’s Buck Steam Station fit the broad CWA definition of a “point source” in *Yadkin Riverkeeper, Inc. v. Duke Energy Carolinas, LLC*, 141 F. Supp. 3d 428 (M.D.N.C. 2015). In denying defendant’s motion to dismiss, the court explained:

The coal ash lagoons at Buck are surface impoundments designed to hold accumulated coal ash in the form of liquid waste. . . . They are impounded by dams towering above the Yadkin River. . . . As such, the coal ash lagoons appear to be confined and discrete. Because the lagoons are allegedly unlined and leaking pollutants into the groundwater, . . . they are also allegedly conveying pollutants to navigable waters. As confined and discrete conveyances, the lagoons fall within the CWA’s definition of “point source.”

Id. at 443-444. A substantial line of cases reach the same conclusion.⁴

⁴ See *United States v. Alpha Nat. Res., Inc.*, No. CIV.A. 2:14-11609, 2014 WL 6686690, at *1 (S.D.W. Va. Nov. 26, 2014) (entering consent decree describing defendant’s coal mining operations as involving discharges that “emanate from various impoundments and settlement ponds, outlets, ditches, and other conveyances that qualify as ‘point sources’ emitting ‘pollutants’” under the CWA.); *Ohio Valley Envtl. Coal., Inc. v. Hernshaw Partners, LLC*, 984 F. Supp. 2d 589, 599 (S.D.W. Va. 2013) (finding a valley fill toe “whereby water percolates and is discharged into the unnamed tributary of Laurel Fork” to be a “point source”); *N. Cal. River Watch v. City of Healdsburg*, No. C01-04686WHA, 2004 WL 201502 at *11 (N.D. Cal. Jan. 23, 2004), *aff’d*, 496 F.3d 993 (9th Cir. 2007) (“The term ‘point source’ has been taken beyond pipes and ditches and now includes less discrete conveyances, such as cesspools and ponds.”);

3. The CWA Extends Jurisdiction Over the Discharge of Pollutants from a Point Source to Surface Waters via Hydrologically Connected Groundwater.

Coal ash basins are point sources regardless of whether they contribute pollutants to surface waters by overland flow or by a pathway from groundwater to surface water. This Court has already ruled that the CWA covers discharges from point sources to surface waters via hydrologically connected groundwater. *See* Mem. Op. & Order (ECF No. 21) at 8-11. As another court explained, “it would hardly make sense for the CWA to encompass a polluter who discharges pollutants via a pipe running from the factory directly to the riverbank, but not a polluter who dumps the same pollutants into a man-made settling basin some distance short of the river and then allows the pollutants to seep into the river via the groundwater.” *N. Cal. Riverwatch v. Mercer Fraser Co.*, No. C-04-4620, 2005 WL 2122052, at *2 (N.D. Cal. 1 Sept. 2005).

This Court, in finding that Plaintiff sufficiently alleged a groundwater to surface water discharge to survive a motion to dismiss, looked to *Yadkin Riverkeeper* as a case “close enough in all relevant respects such that it is significant and instructive.” Mem. Op. & Order (ECF No. 21) at 11. The court in *Yadkin Riverkeeper* agreed “with the line of cases affirming CWA jurisdiction over the discharge of pollutants to navigable surface waters via hydrologically connected groundwater, which serves as a conduit between the point source and the navigable

N.C. Shellfish Growers Ass’n v. Holly Ridge Associates, 278 F. Supp. 2d 654, 679-81 (E.D.N.C. 2003) (ditches, check dams and sediment traps, gullies and rills, and entire site were all point sources under the CWA); *see also United States v. Earth Sciences, Inc.*, 599 F.2d 368, 373-374 (10th Cir. 1979) (finding that a gold leaching operation is a point source); *Dague v. City of Burlington*, 935 F.2d 1343, 1354-55 (2d Cir. 1991), *rev’d on other grounds*, 505 U.S. 557 (1992) (finding landfill and associated culvert to be a point source); *N. Cal. River Watch v. Redwood Landfill Inc.*, No. C 07-05058WHA, 2007 WL 4557783, at *4 n.3 (N.D. Cal. Dec. 21, 2007) (finding landfill to be a point source).

waters.” 141 F. Supp. 3d at 445. The vast majority of courts to consider claims regarding similar discharges to surface water through groundwater have reached the same conclusion.⁵

In summary, Sierra Club has established the requisite direct hydrologic connection between the Coal Ash Sources and arsenic discharges to surface waters in this case: there are 150

⁵ *Waterkeeper All., Inc. v. U.S. EPA*, 399 F.3d 486, 515 (2d Cir. 2005) (upholding EPA’s case-by-case approach to regulating feedlot pollutant discharges to surface waters through connected groundwater); *Quivira Mining Co. v. U.S. EPA*, 765 F.2d 126, 130 (10th Cir. 1985) (finding CWA coverage where discharges ultimately affected navigable-in-fact streams via underground flows); *U.S. Steel Corp. v. Train*, 556 F.2d 822, 852 (7th Cir. 1977) (CWA “authorizes EPA to regulate the disposal of pollutants into deep wells, at least when the regulation is undertaken in conjunction with limitations on the permittee’s discharges into surface waters.”), *overruled on other grounds by City of W. Chicago v. U.S. Nuclear Regulatory Comm’n*, 701 F.2d 632, 644 (7th Cir. 1983); *Ohio Valley Envtl. Coal. Inc. v. Pocahontas Land Corp.*, No. CIV.A. 3:14-11333, 2015 WL 2144905, at *8 (S.D.W. Va. May 7, 2015) (CWA jurisdiction includes discharges to surface water via hydrologically connected groundwater); *Hawai’i Wildlife Fund v. Cnty. of Maui*, Civ. No. 12-00198, 2015 WL 328227, at *6 (D. Haw. Jan. 23, 2015) (*Haw. II*) (adopting defendant’s contrary view would erode the CWA’s prohibition on discharges of pollutants without a permit); *Hawai’i Wildlife Fund v. Cnty. of Maui*, 24 F. Supp. 3d 980, 996 (D. Haw. 2014) (*Haw. I*) (where groundwater acts as a conduit conveying point source pollution, discharge “is functionally one into navigable water” subject to CWA liability); *accord Raritan Baykeeper, Inc. v. NL Indus., Inc.*, No. 09-CV-4117 JAP, 2013 WL 103880, at *15 (D.N.J. Jan. 8, 2013); *Ass’n Concerned Over Res. & Nature, Inc. v. Tennessee Aluminum Processors, Inc.*, No. 1:10-00084, 2011 WL 1357690, at *17 (M.D. Tenn. Apr. 11, 2011); *Greater Yellowstone Coal. v. Larson*, 641 F. Supp. 2d 1120, 1138 (D. Idaho 2009); *Nw. Envtl. Def. Ctr. v. Grabhorn, Inc.*, No. CV-08-548-ST, 2009 WL 3672895, at *11 (D. Or. Oct. 30, 2009); *Hernandez v. Esso Std. Oil Co. (P.R.)*, 599 F. Supp. 2d 175, 181 (D.P.R. 2009); *Coldani v. Hamm*, NO. CVS07 660-RRB-EFB, 2007 WL 2345016, *7 (E.D. Cal. Aug. 14, 2007); *N. Cal. Riverwatch v. Mercer Fraser Co.*, No. C-04-4620-SC, 2005 WL 2122052, at *2 (N.D. Cal. Sept. 1, 2005); *Sierra Club, Mineral Policy Ctr. v. El Paso Gold Mines, Inc.*, No. CIV.A.01 PC 2163 OES, 2002 WL 33932715, at *10 (D. Colo. Nov. 15, 2002); *Idaho Rural Council v. Bosma*, 143 F. Supp. 2d 1169, 1180 (D. Idaho 2001); *Mutual Life Ins. Co. v. Mobil Corp.*, No. Civ. A. 96-CV1781, 1998 WL 160820, at *3 (N.D.N.Y. Mar. 31, 1998); *Williams Pipe Line Co. v. Bayer Corp.*, 964 F. Supp. 1300, 1319-20 (S.D. Iowa 1997); *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 990 (E.D. Wash. 1994); *Sierra Club v. Colo. Ref. Co.*, 838 F. Supp. 1428, 1434 (D. Colo. 1993); *McClellan Ecological Seepage Situation v. Weinberger*, 707 F. Supp. 1182, 1195-96 (E.D. Cal. 1988), *vacated on other grounds*, 47 F.3d 325 (9th Cir. 1995); *State of N.Y. v. United States*, 620 F. Supp. 374, 381 (E.D.N.Y. 1985).

tons of arsenic in the coal ash at the CEC Site, (PFF 95), which dissolves into groundwater, and flows only 70 to 100 feet to reach surrounding surface waters, (PFF 210).⁶

4. EPA's Long-Standing Construction of the CWA is Entitled to Deference.

EPA's longstanding position is that the CWA covers discharges of pollutants to groundwater that flow to jurisdictional surface waters by a direct hydrological connection. To the extent that there is any statutory ambiguity on this point, EPA's interpretation is entitled to deference. *See Chevron v. NRDC*, 467 U.S. 837 (1984) (deferring to EPA construction of the Clean Air Act); *Coeur Alaska, Inc. v. Se. Alaska Conservation Council*, 557 U.S. 261 (2009) (deferring to EPA construction of the CWA in agency memorandum).

In 1990, EPA promulgated storm water regulations that distinguished between groundwater generally, which is not covered under the CWA, and groundwater that is hydrologically connected to surface waters, which is covered. EPA explained that "this rulemaking only addresses discharges to water of the United States, consequently discharges to ground waters are not covered by this rulemaking (*unless there is a hydrological connection between the ground water and a nearby surface water body*)."

NPDES Permit Application Regulations for Storm Water Discharges, 55 Fed. Reg. 47,990, 47,997 (Dec. 2, 1990) (emphasis

⁶ While two circuit court cases found that the CWA did not reach discharges to, or though, groundwater, those cases are distinguishable, involving settings where there was no evidence of the requisite direct hydrological connection to surface water. In *Vill. of Oconomowoc Lake v. Dayton Hudson Corp.*, 24 F.3d 962 (7th Cir. 1994), the Seventh Circuit upheld the district court dismissal of a CWA citizen suit respecting a stormwater pond at a warehouse, finding that the jurisdictional reach of the Act does not extend to all groundwater, even though "ground water eventually reaches streams, lakes, and oceans[.]" *Id.* at 963. Similarly, the Fifth Circuit declined to extend CWA jurisdiction to discharges through surface water "that have only an indirect, remote, and attenuated connection with an identifiable body of 'navigable waters.'" *Rice v. Harken Expl. Co.*, 250 F.3d 264, 272 (5th Cir. 2001). But these cases are inapposite, dealing with a generic, eventual, or even conjectural connection between groundwater and surface water.

added). Similarly, in the preamble to its final rule addressing water quality standards on Indian lands, EPA stated:

[T]he Act requires NPDES permits for discharges to groundwater where there is a direct hydrological connection between groundwaters and surface waters. In these situations, the affected groundwaters are not considered “waters of the United States” but discharges to them are regulated because such discharges are effectively discharges to the directly connected surface waters.

56 Fed. Reg. 64,876, 64,982 (Dec. 12, 1991). EPA reiterated its position in 2001, *see* 66 Fed. Reg. 2,960, 3,017 (Jan. 12, 2001), and again in 2015, explaining that “the agency has a longstanding and consistent interpretation that the Clean Water Act may cover discharges of pollutants from point sources to surface water that occur via ground water that has a direct hydrologic connection to the surface water.” EPA, *Response to Comments* (June 30, 2015).⁷

5. Even faced with a Contrary State Construction, EPA’s Construction of the CWA and Virginia Implementing Regulations is Entitled to Deference.

During trial, Mr. Golden testified that the Virginia DEQ does not construe discharges from groundwater to surface water as a “point source.” (Trial Tr. at 794:24 – 795:14.) Mr. Golden’s testimony, however, is entitled to no weight in deciding this question of law. EPA—the federal agency Congress charged with administering the CWA—has consistently construed the Act to reach discharges of pollutants to jurisdictional surface waters where there is a “direct hydrological connection.” The Virginia DEQ is not permitted to adopt a different construction.

Courts defer to EPA’s construction of the CWA and state regulations implementing the Act. In *Arkansas v. Oklahoma*, 503 U.S. 91 (1992), the Court deferred to EPA’s interpretation of Oklahoma’s standards, finding that such “state water quality standards—promulgated by the

⁷ Available at <http://www.epa.gov/cleanwaterrule/response-comments-clean-water-rule-definition-waters-united-states>.

States with substantial guidance from the EPA and approved by the Agency—are part of the federal law of water pollution control.” *Id.* at 110; *see also Finnerty v. Thornton Hall, Inc.*, 42. Va. App. 628, 634 (2004) (noting that a state “agency does not possess specialized competence over the interpretation of a statute merely because it addresses topics within the agency’s delegable authority”). Here Mr. Golden acknowledged that DEQ did not consider EPA’s guidance, and that DEQ is not at liberty to disregard EPA guidance. (PFF 109.) Additionally, Mr. Golden did not cite to any written guidance or rule language to support the construction he offered at trial, and this Court should not give any weight to such “unpublished opinions of agency staff.” *United States v. Farley*, 11 F.3d 1385, 1390 (7th Cir. 1993) (citing *International Paper Co. v. Federal Power Comm’n*, 438 F.2d 1349, 1358–1359 (2d Cir.1971)).

6. Count I Encompasses Arsenic Discharges from the Columbia Natural Gas Property.

Plaintiff asserts claims here that stem from Dominion’s discharge of coal ash, not only on the property that it continues to own and operate, but also on property now owned by Columbia Natural Gas (“CNG”). Dominion disposed of coal ash on this property up until about 1970, when it conveyed the property to CNG. Dominion, however, remains liable for CWA violations stemming from its coal ash remaining on the CNG property. Liability for violating the CWA is broadly defined and not predicated on ownership of property or operation of a site. CWA Section 301(a) provides that, except in compliance with the Act, “the discharge of any pollutant by any person shall be unlawful.” 33 U.S.C. § 1311(a). A recent case illustrates the point. In *San Francisco Herring Association v. Pacific Gas & Electrical Co.*, 81 F. Supp. 3d 847 (N.D. Cal. 2015), the court denied a motion to dismiss a CWA claim regarding pollution arising from defendant’s operation of a plant over a century ago that it no longer owned.

B. Dominion is in Direct Violation of Sections II.R and II.F of its Water Pollution Permit (Counts II and III).

As asserted in Counts II and III of the Complaint, Sierra Club has established that Dominion is violating express conditions of the VPDES Permit by allowing coal ash – which is a sludge and an industrial waste, (PFF 29-30) – and arsenic from the coal ash, to enter state waters. As explained above, the violations alleged in Count I depend on the Court finding “point sources” discharging to surface water through a “direct hydrologic connection.” However, these issues are not presented in Counts II and III. With regard to these counts, the violation is simply that Dominion has allowed coal ash and pollutants from coal ash removed during treatment to enter state waters contrary to the express terms of the permit. Thus, Dominion’s coal ash pollution of groundwater and surface water at CEC violates the VPDES Permit, and thus violates the Act for this independent reason.

Condition II.R—commonly referred to as the “Removed Substances” provision—provides:

Disposal of Solids or Sludges.

Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

(PFF 115.) Similarly, condition II.F.1—the “Unauthorized Discharges” provision—provides:

Unauthorized Discharges.

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; . . .

(PFF 116.) The Virginia Code defines “state waters” to include groundwater. (PFF 117); Va. Code Ann. § 62.1-44.3. Thus, Dominion’s violation of these permit terms is complete once coal ash or associated pollutants reach groundwater. These violations also encompass the further release of arsenic from groundwater to surface water, which is also included in the definition of “state waters.”

The unambiguous requirements contained in Parts II.F and II.R of Dominion’s VPDES permit have been included in substantially the same form in the CWA permits for the CEC site since the first permit issued in 1975. (Pl. Ex. P520, at SELC_008947; *see also* Def. Exs. 32, 36, 39 and 41.) Virginia, like many other states, includes a Removed Substances provision in its CWA permits, to ensure that waste treatment facilities like CEC do not allow the solids, sludges, and pollutants they remove in the course of waste treatment to leak out into the environment. Virginia also includes a broad “Unauthorized Discharges” prohibition in its CWA permits. If such restrictions were not included, and these facilities were allowed to leak pollution into groundwater and surface waters, they would not serve their essential purpose as waste treatment and management facilities, but instead would be waste *transmission* facilities.

1. Facts Related to Dominion’s Violations in Counts II and III.

The coal ash wastewater at the CEC site were treated using the Bottom Ash and Sediment Ponds to remove coal ash solids and some pollutants from the wastewater before discharge via a riser structure through the permitted outfall. (PFF 62-80.) Burning coal for electricity does not inherently generate any coal ash wastewater. Dominion chose to continue sluicing ash at the CEC site after the Clean Water Act was enacted, and Dominion accepted the terms of its VPDES wastewater permit in order to continue doing so under the Act.

Most of the coal ash generated at CEC from 1953 to 1984 was mixed with water to aid in transporting the ash (i.e. sluicing it) to the unlined pits that comprise the Historic Pond. (PFF 32.) Much of the ash in the Historic Pond is sitting directly in the groundwater, (PFF 176, 177), in violation of the Removed Substances and Unauthorized Discharges provisions of Dominion's CWA Permit. From 1984 to the present, Dominion used the unlined Bottom Ash Pond and Sedimentation Pond for passive treatment and storage of coal ash, which have leaked and continue to leak arsenic into groundwater and the surrounding surface waters. (PFF 96-100.) Starting in 1984, excess coal ash solids and pollutants have also been transferred from the Bottom Ash Pond to the Ash Landfill. (PFF 45-61.) Because these solids, sludges, and pollutants have been allowed to sit in and leak into the groundwater from all of the coal ash basins, Dominion's wastewater practices violate the Removed Substances and Unauthorized Discharges provisions.

2. Citizen Plaintiffs Are Authorized to Enforce All CWA Permit Conditions.

The CWA expressly authorizes citizen suits to enforce *all* conditions of CWA Permits. *See* 33 U.S.C. §§ 1365(a)(1), (f)(6); *see also* 40 C.F.R. § 122.41(a) (“*Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action.*” (emphasis added)). The Supreme Court has held that under the Clean Water Act, “all dischargers . . . may be sued to enforce permit conditions, whether those conditions arise from standards and limitations promulgated by the Administrator or from stricter standards established by the State.” *Env'tl. Prot. Agency v. California ex rel. State Water Res. Control Bd.*, 426 U.S. 200, 224 (1976). The Fourth Circuit has made clear that the CWA authorizes citizen enforcement of even those permit terms that require monitoring, reporting, recordkeeping, and other conditions. *See Sierra Club v. Simkins Industries, Inc.*, 847 F.2d 1109, 1115 (4th Cir. 1988) (“Simkins’ reporting

requirements are expressly made conditions of its permit, and therefore violations of these conditions, by operation of § 1365(f)(6) [CWA § 505(f)(6)], are violations of an effluent standard or limitation of § 1365(a).”). Thus, the CWA allows citizens’ groups to enforce all permit conditions, even when a permit condition regulates discharges to non-navigable waters that would otherwise be outside the scope of the CWA. *Conn. Fund For Env’t v. Raymark Indus., Inc.*, 631 F. Supp. 1283, 1285 (D.Conn.1986) (citizens’ suit not limited to discharges to navigable waters; citizens may enforce “*any* condition of any permit issued under section 402 [33 U.S.C. § 1342].” (citation omitted) (emphasis in original)).

In short, states may impose permit conditions that are not limited by the minimum requirements of the Act or the CWA’s jurisdictional coverage over waters of the United States. That is precisely what the plain text of Dominion’s VPDES Permit – at parts II.F and II.R – does here. These terms broadly prohibit any pollution from the coal ash basins to reach “state waters” – a term that under Virginia law encompasses surface water and groundwater. Dominion’s ongoing violations of those conditions are properly enforced by a citizen suit here. Moreover, Plaintiff has established that arsenic contamination reaches groundwater and surrounding surface waters. Thus, even if this Court were to construe these permit provisions to apply only to discharges to surface water, Plaintiff has still shown that Dominion is violating them.

In an attempt to evade the unambiguous terms of this provision, Dominion claims the terms of the Removed Substances provision somehow do not apply to Dominion’s coal ash management and pollution. (Opp. to MSJ at 25). But the Coal Ash Sources at issue here contain coal ash and pollutants “removed in the course of treatment or management of pollutants” by settling prior to discharge through the permitted outfall. The coal ash, which is both a solid and a

sludge, and associated pollutants, have been disposed of in the Historic Pond, the Ash Landfill, and the Bottom Ash Pond.

The court in *Yadkin Riverkeeper*, in considering a similar claim brought under a Removed Substances provision of the permit in that case, denied defendant's motion to dismiss the claim.⁸ The court in *Yadkin Riverkeeper* recognized that the Removed Substances provision means what it says and is enforceable under the CWA as to both groundwater and surface water pollution. *See* 141 F. Supp. 3d at 447. As the court explained, the Removed Substances provision specifically "aims to ensure the integrity of *wastewater treatment and control systems*." *Id.* at 446 (emphasis added). The court went on to explain that a provision included in a CWA permit does not need to be a requirement of the Act to be valid and enforceable, and that the Act expressly allows states to incorporate stricter effluent limits and authorizes a citizen suit to enforce those limitations. *Id.* at 448.

Similarly, in *Cape Fear River Watch, Inc. v. Duke Energy Progress, Inc.*, the court held that the same North Carolina permit provision is enforceable in a CWA citizen suit as to all waters of the state, including groundwater. *See* 25 F. Supp. 3d 798, 810 n.14 (E.D.N.C. 2014). The *Cape Fear River Watch* court recognized that "state laws may be more stringent than the floor of the CWA *and regulate ground water as part of their permitting processes*." *Id.* at 810 n.12 (emphasis added), *amended by* 2014 WL 10991530 (Aug. 1, 2014) (clarifying that groundwater violations of Removed Substances provision are enforceable by CWA citizen suit).

⁸ The provision at issue in the *Yadkin Riverkeeper* reads, in relevant part: "Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be utilized/disposed of ... in a manner such as to prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States except as permitted by the Commission." 141 F. Supp. 3d at 446.

Indeed, no court to examine a Removed Substances provision has ever accepted the arguments Dominion has put forward. On the contrary, the important role of such provisions for ensuring the proper functioning of wastewater treatment systems under the Act has been recognized for decades. In reviewing a similar Removed Substances provision in an NPDES permit for gold mining activities in 1990, EPA's Environmental Appeals Board explained that the provision was included in the permit:

based on the simple proposition that there is no way one can protect the water quality of the waters of the U.S if the miner is allowed to redeposit the pollutants collected in his settling ponds back in the waters of the U.S. since that would be contrary to the general requirements [and] conditions of the CWA.

In the Matter of: 539 Alaska Placer Miners, More or Less, & 415 Alaska Placer Miners, More or Less, Permittees, 1085-06-14-402C, 1990 WL 324284, at *8 (E.P.A. Mar. 26, 1990); *accord* 40 C.F.R. § 440.148(c) (“Measures shall be taken to assure that pollutant materials removed from the process water and wastewater streams *will be retained in storage areas* and not discharged or released to the waters of the United States.”) (emphasis added). Here, Virginia has applied the same common-sense principle to all its waters, just as other states have.

Dominion claims another provision of the Permit, Paragraph I.D.7 (the “Materials Handling” provision), should supplant the Removed Substances provision. (Opp. to MSJ at 23). But that provision covers different materials and different activities than those governed by the Removed Substances provision. Paragraph I.D.7 is titled “Materials Handling and Storage” and applies to “[a]ny and all product, materials, industrial wastes, and/or other wastes *resulting from the purchase, sale, mining, extraction, transport, preparation and/or storage of raw or intermediate materials, final product, by-product or wastes . . .*” (emphasis added). The Materials Handling provision does *not* apply to the solids, sludges, and pollutants resulting from

wastewater treatment. By contrast, the Removed Substances provision specifically covers “solids, sludges or other pollutants *removed in the course of treatment or management of pollutants . . .*” (Plaintiff’s Ex. 88, Paragraph II.R (emphasis added).)

Moreover, even if the Materials Handling provision did apply to Dominion’s coal ash and pollutants removed from its wastewater, in addition to the Removed Substances provision, such a requirement is perfectly consistent with the Removed Substances provision. Both provisions prohibit releases to State waters, which includes groundwater. Dominion has suggested that the Materials Handling provision’s use of the phrase “except as expressly authorized” means that “any discharges at CEC *could be* expressly authorized by the Waste Permit.” (Opposition to MSJ at 24, emphasis added). However, as explained in section I.C of this brief below, the Solid Waste permit in no way “expressly authorizes” such pollution.

The Removed Substances provision’s unambiguous prohibition against coal ash solids, sludges, and pollutants entering state waters means that the coal ash must be removed from the groundwater at CEC. To allow Dominion to leave its coal ash sitting in state waters would directly contradict the Removed Substances provision’s prohibition against allowing these materials to enter state waters. In effect, such an outcome would impermissibly rewrite the Permit to excuse Dominion from compliance with its express terms.

3. Dominion Improperly Asks this Court to Rewrite the Permit.

If the coal ash at the CEC Site is not removed, it will continue releasing arsenic in perpetuity. (PFF 318, 319.) Contrary to the plain language of the prohibitions in Parts II.F and II.R of Dominion’s VPDES Permit, Dominion asks this Court to rewrite the permit to allow Dominion to leave its coal ash and arsenic in the groundwater and to perpetually violate the law. Congress, however, did not grant courts the authority to rewrite CWA permits, which require

public notice, public comment, a possibility of public hearings, and the opportunity for judicial review.⁹ If a permit is to be significantly changed, it must be done through an amendment process that has the same safeguards.¹⁰ These safeguards are designed to ensure the public and public resources are protected. Dominion is asking the Court to go beyond the role that the judiciary plays. This Court should decline Dominion's invitation to rewrite the permit, and enforce the permit as written.¹¹

4. This Court Should Not Give any Weight to the Testimony of DEQ's Mr. Golden Regarding the Legal Effect of the Plain Language of Dominion's Permit.

The testimony offered by Mr. Golden of the Virginia DEQ at trial regarding these permit terms is flatly inconsistent with the plain text of these permit terms, and is not entitled to any weight by this Court. *See Auer v. Robbins*, 519 U.S. 452, 461 (1997) (deferring to federal agency's construction of its own regulations only where that construction is not inconsistent with the plain text). This Court should enforce the plain text of the permit, not what DEQ claims that it means. By bringing Counts II and III, the Sierra Club is acting consistently with the purposes of the CWA citizen suit provision "to both goad the responsible agencies to more vigorous enforcement of the anti-pollution standards and, if the agencies remained inert, to provide an

⁹ *See* 33 U.S.C. § 1342(b)(3); 40 C.F.R. §§ 124.10-12 (notice, comment, public hearing), 123.30 (judicial review); 9 V.A.C. 25, Ch. 31., Part IV (Public Involvement).

¹⁰ 40 C.F.R. §§ 122.62; 123.25 (requirements applicable to delegated state permitting programs); 9 V.A.C. 25-31-370 (permit modifications trigger all Public Involvement requirements).

¹¹ Dominion may argue, as it did in its motion to dismiss, that its CWA permit somehow shields its violations of conditions II.F and II.R. *See* 33 U.S.C. § 1342(k). Any such argument would fail as a matter of common sense. In order for the so-called "permit shield" to apply, a permittee must fully comply with all permit terms. *Piney Run Pres. Ass'n v. Cnty. Comm'rs*, 268 F.3d 255, 259 (4th Cir. 2001). The shield "only applies to a permit holder who complies with *all* the conditions of its permit," *Ohio Valley Envtl. Coal., Inc. v. Marfork Coal Co., Inc.*, 966 F. Supp. 2d 667, 683 (S.D.W. Va. 2013) (emphasis in original).

alternative enforcement mechanism.” *Student Public Interest Research Grp. of New Jersey, Inc. v. Fritzsche, Dodge & Olcott, Inc.*, 759 F.2d 1131, 1136 (3d Cir. 1985) (quoting *Baughman v. Bradford Coal Co., Inc.*, 592 F.2d 215, 218 (3d Cir. 1979)). In order to fulfill the purposes of the CWA, the plain terms of CWA permits should be enforced:

When a state agency that has the power to fulfill its obligations defers to other pressures, it abdicates its duty to act. Be those pressures political, economic or otherwise, the result is the same. In this case, the spirit and intent of the CWA is frustrated and the law of the land is submerged to other interests. It is in this context that federal courts have traditionally been called upon to exercise their jurisdiction by dragging reluctant state officials into compliance with our Constitution and federal laws. Under these circumstances, it is the obligation of this Court to enforce the plain meaning of the permit.

Natural Resources Defense Council, Inc. v. Texaco Refining & Marketing, Inc., 20 F. Supp. 2d 700, 711-12 (D. Del. 1998).¹²

C. Dominion’s Solid Waste Permit Does Not Excuse its CWA Violations.

Dominion’s Solid Waste Permit does not excuse its violations of the CWA. Indeed, this Court already found “no merit in this argument.” Mem. Op. & Order (ECF No. 21) at 8.

To begin with, the Solid Waste Permit applies only to the Ash Landfill and does not apply to the unlined Historic Pond, the Bottom Ash Pond or the Sediment Pond. Additionally, the Solid Waste Permit provides that it “may not act as a shield against compliance with any part of RCRA or any other applicable federal regulation, state regulation or state law.” (Pl. Ex. 168-A at DOM00000007; PFF 147, 148.) Importantly, the Solid Waste Permit does not authorize

¹² See also *Chesapeake Bay Foundation, Inc. v. Bethlehem Steel Corp.*, 652 F. Supp. 620, 632 (D. Md. 1987) (noting that “[o]nly a diligent prosecution by the government precludes a citizen suit; estoppel by state inaction is no defense”); accord *Sierra Club v. Union Oil Co. of Cal.*, 716 F. Supp. 429, 434 (N.D. Cal. 1988)

any groundwater pollution. It requires groundwater monitoring, but the monitoring requirement is in no way an authorization of groundwater pollution. *See* 9 V.A.C. 20-81-250. On the contrary, monitoring allows for the identification of groundwater contamination so the polluter can take action. Similarly, Dominion has tried to suggest that by incorporating a Corrective Action Plan, the Solid Waste Permit somehow authorizes groundwater contamination. But a Corrective Action Plan sets up a process to *remedy* contamination, not authorize it. *See* 9 V.A.C. 20-81-260.

Additionally, Dominion's attempts to recast this CWA enforcement action as a collateral attack on its Solid Waste Permit are without merit. The "collateral attack" doctrine does not apply when citizens seek to enforce the terms of a valid permit. *See Martin v. Stewart*, 499 F.3d 360, 370 (4th Cir. 2007) ("When a Federal court is properly appealed to in a case over which it has by law jurisdiction, it is its duty to take such jurisdiction.") (citation omitted); *see also Ohio Valley Envtl. Coal., Inc. v. Apogee Coal Co., LLC*, 531 F. Supp. 2d 747, 759 (S.D.W. Va. 2008). As this Court already concluded, "this lawsuit does not constitute an improper collateral attack." ECF No. 21 at 6.

II. TO REMEDY THESE VIOLATIONS OF THE CLEAN WATER ACT, THIS COURT SHOULD ORDER INJUNCTIVE RELIEF AND PENALTIES.

A. Sierra Club is Entitled to Injunctive Relief to Remedy and Cease Dominion's CWA Violations.

Permanent injunctive relief is appropriate where: "(i) there is no adequate remedy at law, (ii) the balance of the equities favors the moving party, and (iii) the public interest is served." *Crutchfield v. U.S. Army Corps of Engineers*, 192 F. Supp. 2d 444, 456 (E.D. Va. 2001) (citations omitted). While these traditional equitable considerations provide the starting point for

the Court's evaluation of the relief requested by Plaintiff, the Court must consider the direction provided by Congress in the CWA in shaping the contours of injunctive relief here.

It is a "well-established rule that where Congress expressly provides for injunctive relief to prevent violations of a statute, a plaintiff does not need to demonstrate irreparable harm to secure an injunction." *Burlington N.R.R. v. Bair*, 957 F.2d 599, 601 (8th Cir. 1992) (citing *United States v. City of San Francisco*, 310 U.S. 16, 31 (1940)). The traditional equitable inquiry is unnecessary where a federal statute has been violated because, "Congress has already balanced the equities and has determined that, as a matter of public policy, an injunction should issue where the defendant is engaged in, or is about to engage in, any activity which the statute prohibits." *Id.* at 601-602 (citation omitted). While district courts have equitable discretion, they may not "reject the balance that Congress has struck in a statute." *United States v. Oakland Cannabis Buyers' Coop.*, 532 U.S. 483, 497 (2001).

Further, in *Weinberger v. Romero-Barcelo*, 456 U.S. 305 (1982), the Supreme Court made clear that the CWA allows a district court "to order that relief it considers necessary to secure prompt compliance with the Act." *Id.* at 320. The Court explained as follows: "We read the FWPCA as permitting the exercise of a court's equitable discretion, whether the source of pollution is a private party or a federal agency, to order relief that will achieve *compliance* with the Act." *Id.* at 318 (emphasis in original).

Thus the applicable equitable factors, in light of Congressional purposes established in the CWA, favor an injunction here. In enacting the Clean Water Act, "Congress made a clear policy choice in favor of environmental protection. (There is no exception to permit compliance because such compliance is expensive.)" *Ohio Valley Envtl. Coal., Inc. v. Apogee Coal Co., LLC*, 555 F. Supp. 2d 640, 649 (S.D.W. Va. 2008). Furthermore, "[h]arm to [the] environment

outweighs a defendant's financial interests, particularly where the violations are of a longstanding and continual nature.” *Ohio Valley Envtl. Coal., Inc. v. Fola Coal Co., LLC*, No. CV 2:13-5006, 2015 WL 5972430, at *3-4 (S.D.W. Va. Oct. 14, 2015) (quoting *Idaho Conservation League v. Atlanta Gold Corp.*, 879 F.Supp.2d 1148, 1161 (D. Idaho 2012)). As the Supreme Court has explained, “[e]nvironmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, i.e., irreparable.” *Amoco Prod. Co. v. Village of Gambell, A.K.*, 480 U.S. 531, 545 (1987).

This Court should exercise its equitable authority here by ordering broad injunctive relief to stop Dominion's ongoing violation of the CWA and its VPDES Permit. As Plaintiff's expert on remedy, Dr. Phillip Bedient, explained at trial, removal of the CEC coal ash to lined storage is appropriate and necessary to remedy Dominion's violations and stop its ongoing, illegal pollution. (PFF 368.) In forming his opinions, Dr. Bedient reviewed the documents that Dominion produced in discovery respecting Dominion's consideration of alternatives to excavation and removal, and rejected the other alternatives as ineffective. (PFF 387 – 395.) Dominion put forth no expert testimony at trial to counter Dr. Bedient's opinions. Rather, Dominion offered only the lay testimony of Ms. Taylor. While Ms. Taylor testified at trial that other alternatives to excavation and removal of the coal ash would work, she acknowledged that she is “certainly not a technical expert” regarding remedial alternatives. (Trial Tr. At 668:23-25.)

While Dominion has proposed, and DEQ has approved, “Monitored Natural Attenuation” as part of the separate Solid Waste Permit for the coal ash landfill at the CEC Site, that “remedy” is not effective and this Court should not accept “natural attenuation” as the remedy for Dominion's violations of the CWA. As Dr. Parette explained at trial, if natural attenuation were working under the DEQ's flawed acceptance of this remedy under the Solid Waste Permit, the

applicable Groundwater Protection Standard of 10 µg/L would already have been met at the CEC Site. (Trial Tr. 288:8 – 300:4) Finally, as Dr. Parette and Mr. Brown explained at trial, Dominion’s proposed plan to leave the ash capped in place will not stop the ongoing, illegal discharge of arsenic to surface waters. (PFF 369-386.)

In light of these facts, excavation and removal of the coal ash at the CEC Site to dry, lined storage away from local waterways is the proper remedy here. Courts have regularly ordered the removal of illegally deposited materials that violate the Clean Water Act. *E.g.*, *U.S. v. Deaton*, 332 F.3d 698 (4th Cir. 2003) (affirming permanent injunction to restore affected area to “pre-violation condition”); *U.S. v. Smith*, 149 F.3d 1172 (4th Cir. 1998) (affirming restorative permanent injunction).¹³ Moreover, “[t]here is no exception to permit compliance because such compliance is expensive.” *Ohio Valley Envtl. Coal., Inc. v. Apogee Coal Co., LLC*, 555 F. Supp. 2d 640, 649 (S.D.W. Va. 2008).

Importantly, the cost of excavation and removal may be considerably lower than the estimates offered at trial. Dominion’s cost expert, Mr. Glover, acknowledged that removal by rail would lower the cost of excavation and removal, and that he did not consider the option of excavation of coal ash from the CEC Site by rail. (Trial Tr. at 924:6-927:7; PFF 418, 419.)

Additionally, Plaintiff’s expert, Dr. Pardue, testified that beneficial uses of coal ash in concrete,

¹³ *Accord U.S. v. Lambert*, 915 F. Supp. 797, 805 (S.D.W. Va. 1996) (injunction to remove illegal fill and restore riverbank); *U.S. Pub. Interest Research Grp. v. Atl. Salmon of Maine, LLC*, 339 F.3d 23 (1st Cir. 2003) (authorizing injunctive relief to remedy harm caused by past violation, including removal of illegal pollutants and sources of pollution); *U.S. v. Cumberland Farms*, 826 F.2d 1151 (1st Cir. 1987) (affirming injunction to restore 2,000 acre property to pre-discharge conditions); *U.S. v. Ciampitti*, 615 F. Supp. 116, 122 (D.N.J. 1984), *aff’d sub nom. U.S. v. Diamond Beach Dev. Corp.*, 772 F.2d 897 (3d Cir. 1985) (“There can be no doubt that this court has the power under the Clean Water Act” to order complete restoration for violations of the Act); *U.S. v. Outboard Marine Corp.*, 549 F. Supp. 1036, 1042 (N.D. Ill. 1982) (CWA authorizes pollution cleanup remedies to address violations and remove past illegal pollution).

as is occurring at the Santee Cooper plant in South Carolina, could lower the costs of the remedy sought here. (Tr. Trans. At 446:5-448:6; PFF 415-417.)

Dominion will remain in violation of the CWA unless this Court affords appropriate injunctive relief to halt the ongoing pollution. In his concurring opinion in *Gwaltney of Smithfield, Ltd.*, 484 U.S. 49, Justice Scalia specifically recognized that a violation of the CWA will continue until the cause of the violation is rectified. Justice Scalia focused on the language in section 505(a)(1) of the CWA that authorizes a citizen suit against any person alleged “to be in violation” of an effluent standard or limitation. 33 U.S.C. § 1365(a)(1). As Justice Scalia remarked: “When a company has violated an effluent standard or limitation, it remains, for purposes of § 505(a), ‘in violation’ of that standard or limitation so long as it has not put in place remedial measures that clearly eliminate the cause of the violation.” 484 U.S. at 69 (Scalia, J. concurring).

Therefore, this Court should order excavation and removal of the coal ash at the CEC Site to a modern, lined landfill. Alternatively, this Court should order Dominion to come into compliance with the CWA as quickly as possible, and retain jurisdiction to require further evaluation of alternatives – including excavation by rail and ash recycling options – and oversee implementation of the remedy until compliance is achieved.

B. This Court Should Impose an Appropriate Civil Penalty.

CWA Section 309(d) provides that violators “shall be subject to a civil penalty.” 33 U.S.C. § 1319(d). The Act further provides:

In determining the amount of a civil penalty the court *shall consider* the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the

applicable requirements, the economic impact of the penalty on the violator, and such other matters as justice may require.

Id. (emphasis added). The Fourth Circuit has interpreted this language to mean that, once there is a finding of liability under the CWA, a court must impose a civil penalty. *Stoddard v. Western Carolina Regional Sewer Auth.*, 784 F.2d 1200, 1208 (4th Cir. 1986). The amount of the penalty is, however, discretionary. *Id.* at 1208-09; *see also Tull v. United States*, 481 U.S. 412, 422-25 (1987) (discussing bases on which penalties should be awarded under the CWA); *Atl. States Legal Found., Inc. v. Tyson Foods, Inc.*, 897 F.2d 1128, 1143 (11th Cir. 1990) (reversing and remanding with instructions that “the district court shall consider and explain its finding on each of the factors enumerated in 33 U.S.C. § 1319(d)”). With reference to these factors, the Court may impose up to \$37,500 per day, per violation, of the CWA. 33 U.S.C. § 1319(d); 40 C.F.R. Part 19; 73 Fed. Reg. 75,340 (Dec. 11, 2008).

In assessing CWA penalties, courts apply one of two methods. Using the “bottom-up” method, courts begin with the violator’s economic benefit from non-compliance and then adjust upward or downward based on the statutory penalty factors. *See United States v. Smithfield Foods, Inc.*, 191 F.3d 516, 528 (4th Cir. 1999). Under the “top-down” method, courts begin with the maximum penalty and adjust downward. *See Atl. States Legal Found.*, 897 F.2d at 1142.

Plaintiff’s expert, Dr. Michael Kavanaugh, provided testimony regarding the important statutory factor of economic benefit. In calculating the economic benefit of Dominion’s violations, Dr. Kavanaugh used an EPA model (commonly called the “BEN model”), to calculate the economic benefit that Dominion received from deferring the costs of compliance with the CWA in this case. (Transcript Day 2 at 346:2 – 347:10.) Dr. Kavanaugh conservatively calculated an economic benefit of \$20,465,261 using a Weighted Average Cost of Capital

(“WACC”) discount rate. The Fourth Circuit has upheld this methodology. *See Smithfield*, 191 F.3d at 530. Alternately, Dr. Kavanaugh calculated an economic benefit of \$42,830,747 using a Capital Asset Pricing Model (CAPM) discount rate. Dr. Kavanaugh predicated this analysis on a cost to achieve compliance of \$221 million, based on Dr. Pardue’s cost estimate to excavate and remove coal ash from the CEC Site. Obviously, however, if the cost of compliance turns out to be greater, the economic benefit of Dominion’s delayed compliance will increase correlatively.¹⁴

Dr. Kavanaugh properly calculated the economic benefit of Dominion’s noncompliance in this case, and Dominion did not offer any expert testimony in response. In addition, the seriousness of the violation is evidenced by the fact that Dominion has been in violation of the CWA for decades. Plaintiff need not prove environmental harm to show the seriousness of the violation. *See Piney run Pres. Ass’n*, 82 F. Supp. 2d at 471; *United States v. Gulf Park Water Co.*, 14 F. Supp. 2d 854, 859 (S.D. Miss. 1998).

Finally, in order to reduce the penalty under the “economic impact on defendant” factor, the defendant bears the burden of showing that “the impact of a penalty would be ruinous or otherwise disabling.” *United States v. Smith*, 1998 WL 325954 at *3 (4th Cir. Feb. 27, 1998); *Gulf Park Water Co.*, 14 F. Supp. 2d at 868. Dominion has not come forward with any evidence that a penalty would be ruinous or disabling – nor could it do so.

¹⁴ Contrary to the suggestion left by Dominion’s cross-examination of Dr. Kavanaugh at trial, EPA does not use this model only for settlement purposes. Rather, EPA guidance states that the model “can be used in all cases that have delayed and/or avoided compliance costs.” *Calculation of the Economic Benefit of Noncompliance in EPA’s Civil Penalty Enforcement Cases*, 70 Fed. Reg. 50,326, 50,328 (proposed Aug. 26, 2005). The EPA does not elaborate on methods for calculating economic benefit in litigation, as opposed to settlement negotiations, because individual experts are given a large amount of deference when calculating the economic benefit of noncompliance. *Id.* at 50,344. EPA guidance explains that “[t]he methods employed in litigation follow the same general principles of the BEN model....” *Id.*

In short, the CWA requires that this Court set an appropriate penalty for Dominion's CWA violations. *See* 33 U.S.C. § 1319(d). This Court must give weight to these and the other statutorily enumerated factors. Based on assessment of these factors, this Court should set an appropriate penalty.

CONCLUSION

For the foregoing reasons, the Sierra Club respectfully request that this Court find that Dominion is violating the Clean Water Act as alleged in Counts I, II and III; order injunctive relief to promptly remedy these violations; order that Dominion pay an appropriate civil penalty to the United States Treasury; order that Defendant pay Plaintiff's reasonable attorney fees; and order any other relief as the Court deems just and proper.

Respectfully Submitted this 7th day of July,

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CERTIFICATE OF SERVICE

I hereby certify that on this 7th day of July 2016, I electronically filed the foregoing with the Clerk of Court using the CM/ECF System which will send notification of such filing to the users registered on the CM/ECF System, including the following:

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